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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,110	06/09/2006	Toshio Hayashi	2006-0436A	7170

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WASHINGTON, DC 20006-1021

EXAMINER

CHO, JENNIFER Y

ART UNIT	PAPER NUMBER
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1621

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/574,110

Applicant(s)

HAYASHI, TOSHIO

Examiner

Jennifer Y. Cho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 3/31/2006.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Detailed Action

- 1 This office action is in response to Applicant's communication filed on 6/9/2006.
Claims 1-6 are pending in this application.

IDS

- 2 The information disclosure statement (IDS) was filed on 3/31/2006. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections – 35 USC 102

- 3 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 4 Claim 1-6 is rejected under 35 U.S.C. 102b as being anticipated by Ishii et al.
(US 5,958,821).

- 5 Ishii et al. teaches the method of oxidation of an aromatic compound having an alkyl substituent (see abstract; column 8, lines 57-58), by oxidizing it with oxygen into an

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aldehyde (column 9, lines 21-23) in the presence of Ag or Au (column 13, line 5), supported on a carrier (column 16, lines 18-21). The group VIII (group 8) elements (column 13, line 2) can also be further supported on the catalyst (column 16, lines 18-21). Ishii et al. further teaches the oxidation to produce an aromatic carboxylic ester (see abstract; column 9, lines 30-36), by the addition of a primary alcohol e.g. methanol, ethanol (column 29, line 2). Therefore these claims are fully met.

Claim Rejections – 35 USC 103

6 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishii et al. (US 5,958,821).

7 Ishii et al. teaches the method of oxidation of an aromatic compound having an alkyl substituent (see abstract; column 8, lines 57-58), by oxidizing it with oxygen into an aldehyde (column 9, lines 21-23) in the presence of Ag or Au (column 13, line 5), supported on a carrier (column 16, lines 18-21). The group VIII (group 8) elements (column 13, line 2) can also be further supported on the catalyst (column 16, lines 18-21). Ishii et al. further teaches the oxidation to produce an aromatic carboxylic ester

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(see abstract; column 9, lines 30-36), by the addition of a primary alcohol e.g. methanol, ethanol (column 29, line 2).

8 Though Ishii et al. does not exemplify the oxidation of an aromatic aldehyde to aromatic carboxylic ester, the art suggests that oxidizing an aromatic aldehyde, using a primary alcohol as the solvent would give the corresponding aromatic carboxylic ester (column 29, lines 1-26). Furthermore, oxidation of aldehydes to carboxylic esters is old in the art.

9 Therefore, it would be prima facie obvious to one of ordinary skill in the art at the time of the invention, to further oxidize the aromatic aldehyde to the carboxylic ester using a primary alcohol. The expected result would be the efficient formation of both an aromatic aldehyde and an aromatic carboxylic ester in good yield.

10 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Y. Cho whose telephone number is (571) 272 6246. The examiner can normally be reached on 9 AM - 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page can be reached on (571) 272 0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jennifer Cho *jc*
Patent Examiner
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J. PARSA
PRIMARY EXAMINER

[Signature]
For

Thurman Page,
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